

BOOK REVIEW

Birds of Southwestern Australia: An atlas of changes in distribution and abundance of the wheatbelt avifauna. D. A. Saunders and J. A. Ingram, Surrey Beatty & Sons. 1995.

In a small scientific community it is often difficult to offer constructive criticism without it being taken personally. Therefore, at the outset, we emphasize that the following critique is provided in the spirit of improving any subsequent edition.

This attractively presented book is in large part based on observations of 187 rural observers from 1987 to 1990 (covering some 15,000 recording weeks). As could be expected from a database that depends on field observations of a largely amateur group, some records are suspect. Furthermore, the book is marred by lack of cognisance of important literature, an inadequate methodology, an ambivalent focus, and over-reliance on data (often irrelevant) from outside Western Australia. For such accounts to be scientifically valuable there needs to be a vigorous sorting of field observations and close checking of records with known distributions and accounts.

Philosophy – The underlying rationale for atlassing is not disclosed or referenced. Acknowledgment of the limitations and benefits of this approach along the lines provided by Paton *et al.* (1984) would have been useful.

Literature – Adequate use is not made of important scientific papers. Kitchener *et al.* (1982), the

first major assessment of wheatbelt bird conservation, is not cited at all and only 3 of its 14 subsidiary papers are referred to, and then only in passing. Storr (1991), which is a monumental synthesis of about one million authenticated records, is mentioned only briefly.

Methodology – The book attempts to quantify decline in distribution of wheatbelt species by comparing the results collected from 187 localities during 4 years with those from 10 localities during 37 years. This comparison is too unbalanced. A more valid approach would be to select 1 or 2 localities as close as possible to each of the 10 historical localities and execute a pairwise comparison using presence/absence data for species. The point source data in Appendix I of Kitchener *et al.* (1982) could also have been treated similarly.

The study region – In the first year of the study, nearly all observers were located in the wheatbelt as defined by the authors. However, inexplicably, the study was subsequently broadened to include up to 16 localities in the higher rainfall portion of the southwest. Hence the ambivalence in the book's title. It must be conceded that the small sample from the wetter southwest is inadequate, adds little to our knowledge of the avifauna of the

Swan Coastal Plain and forest, and detracts from the initial emphasis on the wheatbelt. It also pads out the book with several species not found in the wheatbelt eg: Red-winged Fairy-wren *Malurus elegans* and Red-eared Firetail *Stagonopleura oculata*, and results in the omission of restricted species eg: White-breasted Robin *Eopsaltria georgiana*, Noisy Scrub-bird *Atrichornis clamosus* and Western Whipbird *Psophodes nigrogularis*.

Irrelevant data – The text is padded with data derived from the eastern states, particularly information on status, food, and breeding. Sometimes this is misleading eg: Striated Pardalote *Pardalotus striatus* does not nest in creek banks in WA.

Misidentifications – We acknowledge that bird faunas are not fixed. In very wet years it is not uncommon for more coastal species to penetrate farther inland; conversely, in droughts some species appear closer to the coast. Notwithstanding this, we think that some occurrences out of normal range as listed in Storr (1991) represent errors in identification.

Some congeneric species are notoriously difficult to identify in the field. Extra vigilance is therefore needed in evaluating field identifications of these species. For example, confusion is evident in the following species. Hoary-headed Grebe and Australasian Grebe; Black Falcon, Grey Falcon and Brown Falcon (records of the Black and Grey Falcons are probably based on dark and light morph Brown

Falcons); Brown Quail and Stubble Quail (the former does not occur in the wheatbelt); Brush Bronzewing and Common Bronzewing (records east of Grass Valley of the former); Horsfield's Bronze Cuckoo and Shining Bronze Cuckoo (southwest records of the former); Boobook Owl and Barking Owl (northern records of the latter); Scarlet Robin and Red-capped Robin (northern and inland records of the former); Gilbert's Whistler, Golden Whistler and Rufous Whistler; Red-winged Fairy-wren and Blue-breasted Fairy-wren; Red Wattlebird and Little Wattlebird; Grey-fronted Honeyeater and Yellow-plumed Honeyeater; White-naped Honeyeater and Brown-headed Honeyeater (inland records of former = latter); New Holland Honeyeater, White-cheeked Honeyeater and White-fronted Honeyeater.

Perhaps for some of these species the authors should have adopted the solution they used to accommodate confusion between Carnaby's and Baudin's Cockatoos, namely combining their distributions. Other questionable records of species include: Southern Emu-wren (northern record); Shy Hylacola (westernmost records); Redthroat (westernmost records); Western Thornbill (northern records); White-eared Honeyeater (southern record); White-plumed Honeyeater (southern record); and Yellow-rumped Pardalote (northern records; the mist netted specimens of the latter should have been photographed or at least one retained as a voucher specimen).

The book concludes with some practical advice as to how landholders in the wheatbelt can make a difference in conserving the local bird fauna.

Our overall conclusion is that the book is a useful record of the distribution, during the final four years of the ninth decade of the 20th century, of the easily recognizable and/or common bird species in the wheatbelt of Western Australia – eg: Emu, Pelican, Mountain Duck, Black Duck, Wedge-tailed Eagle, Malleefowl, Galah, Budgerigah, Rainbow Bee-eater, Black-faced Cuckoo-shrike, Willy Wagtail, Brown Honeyeater, Magpie Lark, and maybe Raven. For reliable information on the distribution of cryptic species, species not favoured by farmland, and species easily confused with others, we

prefer the accounts of Kitchener *et al.* (1982) and its primary references and Storr (1991).

LITERATURE CITED

KITCHENER, D. J., DELL, J., MUIR, B. G. and PALMER, M. 1982. Birds in Western Australian wheatbelt reserves – implications for conservation. *Biol. Conserv.* 22: 127–163.

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